Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies	)	ET Docket No. 92-9

COMMENTS OF CBS INC.

CBS Inc. ("CBS"), the licensee of AM, FM and television broadcast stations, files these comments in response to the *Notice of Proposed Rule Making* ("*Notice*") released by the Commission in the instant proceeding (FCC 92-20).

INTRODUCTION

CBS supports the Commission's proposal in this proceeding to reallocate a total of 220 MHz of spectrum between 1.85 and 2.20 GHz -- more specifically, the 1.85 to 1.99, 2.11 to 2.15 and 2.16 to 2.20 GHz bands -- for use by emerging telecommunications technologies, such as personal communications services, data PCS, a generic mobile satellite service, a digital audio broadcasting service, and

low Earth orbit satellites. As Commissioner Duggan stated in his *Separate Statement* to the instant proceeding, the Commission's proposal to "foster technological progress without directing specific results ... [is a] significant [and laudable] act to encourage new communications services." Indeed, CBS anticipates that some of these new technologies may ultimately make available to 2 GHz users new and preferred telecommunications alternatives to their present mode of operations. However, CBS believes that allowing displaced 2 GHz users to utilize spectrum now allocated to broadcast auxiliary services ("BAS") is likely to degrade and overburden existing BAS spectrum. CBS believes that such reallocation would be a grave mistake.

DISCUSSION

In balancing various factors, the Commission concluded that portions of the spectrum considered for reallocation, presently used for private and common carrier fixed microwave operations, could be relocated, with existing users moved to higher frequency bands or to alternate distribution methods. While the Commission correctly, we believe, declined to reallocate 2 GHz spectrum presently used for BAS, it did propose to allow displaced 2 GHz users to use two bands presently shared by BAS and others -- 12.7 to 13.25 GHz and 17.7 to 19.7 GHz.* *Notice*, note 16. CBS opposes the latter proposal.

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* Although the Commission states that it does not intend to reallocate any 2 GHz BAS spectrum "at this time", CBS

[Footnote continued on next page.]

Reallocation of BAS Spectrum Would Degrade Existing Service.

The 2, 7 and 13 GHz bands that are now licensed to broadcasters and cable operators function as the lifeline of the broadcast industry. Among other uses, broadcasters utilize these frequencies for ENG, live coverage of timely events, such as sports, fixed links to retransmit ENG signals to stations' studios, and studio-to-transmitter links. Disruption of these services, whether caused by overcrowding and consequent unavailability, unintentional interference or disregard of broadcasters' needs, would have a disastrous effect on the day-to-day operations of a broadcast station.

The Commission's study, "Creating New Technology Bands for Emerging Telecommunications Technology", FCC/OET TS92-1

[Footnote continued from previous page.]

believes, for the reasons stated in the text, that reallocation of BAS spectrum will not be practical for the foreseeable future. Moreover, it is estimated that the broadcast industry has invested over 75 million dollars in 2 GHz transmission and transmission-related equipment alone. Removal of BAS from the 2 GHz band could force broadcasters to invest an additional 75 million dollars in new microwave equipment. "Emerging Trends for the Broadcast Auxiliary Service" by Richard A. Rudman, Chairman, Society of Broadcast Engineers' National Frequency Coordinating Committee, *1992 Proceedings, 46th Annual Broadcast Engineering Conference Proceedings* (National Association of Broadcasters) ("*Rudman*"), pages 359, 364. Over and above the cost factor, removal of BAS users from the 2 GHz band to less desirable higher bands is likely to result in degraded service. Therefore, CBS believes that the Commission should retain its policy of allowing broadcasters and cable operators to continue to use the 2 GHz BAS spectrum.

(January 1992), recognized that BAS bands are already heavily used and are likely to become significantly more congested with the introduction of the advanced television service.** CBS believes that the addition of displaced 2 GHz users to BAS bands will substantially reduce spectrum availability to BAS users in many parts of the country to the detriment of broadcasters.

Frequency coordination and efficient BAS spectrum utilization are primarily the product of cooperation among co-located users. While local frequency coordinating committees assist in ascertaining spectrum availability and mediate disputes among users, the committees are not intended to and do not assign frequencies or function as

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** *Notice*, ¶¶ 16 and 18. Indeed, since the Commission has tentatively concluded that HDTV and NTSC transmissions run concurrently until at least the year 2008, even greater spectrum may be needed to accommodate the additional microwave links necessary for implementation of this new service. In this regard, the Commission has expressed its appreciation of "the difficulties that broadcasters are likely to face in meeting their auxiliary service needs for both an ATV and an NTSC channel." *See*, *Second Report and Order/Further Notice of Proposed Rule Making in the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket 87-268, FCC 92-174 (released May 8, 1992), pages 30-31. In anticipation of this need and in response to present congestion of spectrum used for BAS, broadcasters have begun to develop and implement plans to use more efficiently existing spectrum. For example, the Southern California Frequency Coordinating Committee, in connection with the 1984 Olympics, established and executed a "Home Channel Plan". *Rudman*, page 362.

"frequency police". *Rudman*, page 359. This coordination process works because of the respect that broadcast and cable users have for the needs of other BAS users. However, we and other broadcasters are concerned that some nonbroadcast users do not have the same high regard for broadcast needs. *See, e.g., Rudman*, pages 361-362. Also, if the Commission permitted further sharing of the BAS bands the coordination process will become much more cumbersome and inefficient. For these reasons, further sharing of any of the BAS bands could result in significant loss or impairment to broadcasters of this critical spectrum.

Many BAS Uses Are Not Amenable to Alternate Technologies

Alternate distribution methods, such as fiber optic cable, are not practical for most broadcast auxiliary uses. Cable can only be used for fixed links. Fiber optics, which is a more expensive technology than microwave technology to employ, is not available in all locations in the US. Moreover, use of fiber or any other type of cable leaves systems at increased risk to sabotage and infrastructure failures. *Rudman*, page 363.

CONCLUSION

While it is important to provide for future technologies, CBS believes that it would be a mistake to jeopardize the utility and operability of existing systems by merging diverse users into any of the presently-authorized BAS bands.

Respectfully submitted,

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